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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,775	12/10/2001	Stephen Mastorides	D6350A	2032

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EXAMINER

SPIEGLER, ALEXANDER H

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,775

Applicant(s)

MASTORIDES ET AL.

Examiner

Alexander H. Spiegler

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 21, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-13 is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 (in part) is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 21 October 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

1. This action is in response to Applicants' response, filed on October 21, 2003. Currently, claims 1 and 3-13 are pending. This action is made FINAL. Any objections and rejections not reiterated below are hereby withdrawn. Specifically, Applicants' have overcome the objections to the specification and the 112, 2nd paragraph rejection as Applicants' have submitted new drawings for Figures 4, 6 and 7, have amended the specification to delete the priority statement (as the application was not granted the benefit of the provisional application 60/250,084, see last office action), and have amended Claim 3 to delete the second "said". Additionally, the Applicants' declaration has overcome the 102(a) rejection and Applicants' arguments have overcome the 102 rejection of Pinkel et al.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3 remain rejected under 35 U.S.C. 102(b) as being anticipated by Fleming (USPN 4,654,989).

Fleming et al. teaches a cryoarray device comprising:

a mold plate having an upper and a lower surface;

mold alignment pins, said mold alignment pins perpendicularly attached to the lower surface of said mold plate;

an ejector plate having an upper surface and a lower surface, said plate comprising holes between said upper surface and said lower surface;

ejector pins, said ejector pins comprising ejector thumb pads attached to an upper surface of said pins, said ejector pins connecting said mold plate and said ejector plate;

and cryoarray pins, said cryoarray pins equal in number to said holes in said ejector plate and aligned with said holes in said ejector plate. (See Figs. 1-5 and cols. 2-3, for example)

Fleming et al. also teaches the cryoarray device,

wherein said mold alignment pins direct the placement of said device into a tissue mold;

wherein said cryoarray pins connect operably to the lower surface of said mold plate and are capable of passing through said holes in said ejector plate;

wherein said ejector pins are capable of lowering and of raising said ejector plate over said cryoarray pins. (See Figs. 1-5 and cols. 2-3, for example)

It is noted, the recitations of “cryoarray device”, “mold alignment pins” and “cryoarray pins” do not have any structural limitations associated with them, and therefore, are not given any patentable weight. Similarly, the recitation of “to direct placement of said device into a tissue mold” is an intended use of the mold alignment pins, and therefore, is also not given any patentable weight.

Applicants Arguments

Applicants argue:

Neither of the vertical plates disclosed in Fleming et al. is an ejector plate. The vertical plates are connected by spacers at a permanently fixed distance and do not move.

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As such, the pins in the pin screen can not comprise ejector pins to move one of the plates. The horizontal pins are not attached to either plate but move through the plates upon application of pressure not originating from the device.

Additionally, the pin screen requires that, both structurally and functionally, the plates be disposed vertically and the pins horizontally, thus the vertical plates can not have an upper and lower surface that is structurally significant. Applicants' device requires that structurally the plates are disposed horizontally, as they are recited as having an upper and a lower surface, to provide a functional device. The pin screen in Fleming et al. will not retain the image it is intended to make if placed horizontally. At a minimum, absent teachings of an ejector plate and ejector pins, Applicants respectfully submit that Fleming et al. do not anticipate Applicant's claimed invention.

(See Applicants remarks on pages 12-13)

Response to Applicants Arguments

Applicants' arguments have been considered, but are not persuasive for the following reasons. First, Applicants' are arguing several limitations that are not recited in the claims. For example, none of the claims recite the limitation that the "vertical plates are connected by spacers at a permanently fixed distance and do not move", nor do the claims recite that the limitation that "the plates are disposed horizontally". It is also noted the specification, nor Applicants arguments present any distinguishing attributes (i.e., structural limitations) between the ejector plate, ejector pins, mold alignment pins, mold plate, etc. and the teachings of Fleming. Applicants' argument with respect to upper and lower surfaces on the vertical plate, is not persuasive, since "upper and lower" surfaces are relative terms; relative to how the device is viewed, whether the device is placed on its side, etc. That is, even if the device is placed one way only offers a front and back surface, if placed on its side, these surfaces can become "upper and lower" surfaces. Accordingly, because the structural components of the claimed device and the device of Fleming remain indistinguishable, the rejection is maintained.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming (USPN 4,654,989) as applied to claims 1 and 3 above, and further in view of Vollom (USPN 6,298,587).

The teachings of Fleming are presented above. Specifically, Fleming teaches the claimed device, but does not teach said device comprising ejector pins that are capable of lowering and of raising the ejector plate over the cryoarray pins.

However, Vollom teaches the lowering and raising the ejector place over the cryoarray pins (see cols. 1-2). Specifically, Vollom expressly incorporates the teachings of Fleming (see col. 1), and teaches that a moving ejector plate is advantageous for allowing the pin screen to be reset while in a vertical position.

In view of the teachings of Vollom, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Fleming so as to have a moveable ejector plate, in order to have achieved the benefit of allowing the pin screen to be reset while in a vertical position.

Applicants Arguments

Applicants argue Fleming does not teach the claimed cryoarray device and the teachings of Vollom do not correct these deficiencies. Applicants also argue:

The transparent plate in Vollom is a solid structure which is moved horizontally to push against the heads of the pins, which are not attached to any component of the pin screen, to reset the pins. This distinctly teaches away from Applicants' invention.

(See Applicants remarks on page 15)

Response to Applicants Arguments

Applicants' arguments have been considered, but are not persuasive for the following reasons. First, Applicants do not provide the support for their assertions of the teachings of Vollom. Next, neither the recitation of "vertical" or "horizontal", nor any forms of these words are used in Claims 1, 3 or 4, and therefore, Applicants are arguing limitations not found in the claims (e.g., with respect to Applicants argument that Vollom's solid structure is moved horizontally, which allegedly teaches away from Applicants' invention). Finally, terms such as horizontal and vertical can be relative terms in view of how one orientates the device. When the device is place one way, the movement of a part of the device can be horizontal, but when placed another way, the movement of a part of the device can be vertical. Accordingly, because Applicants' arguments have not been found to be persuasive, the rejection is maintained.

Conclusion

6. Claims 5-13 are allowable.
7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

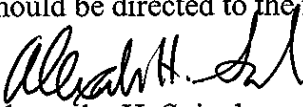
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

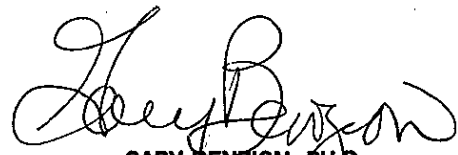
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander H. Spiegler whose telephone number is (703) 305-0806. The examiner can normally be reached on Monday through Friday, 7:00 AM to 3:30 PM.

If attempts to reach the examiner are unsuccessful, the primary examiner in charge of the prosecution of this case, Carla Myers, can be reached at (703) 308-2199. If attempts to reach Carla Myers are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (703) 308-1119. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306. Applicant is also invited to contact the TC 1600 Customer Service Hotline at (703) 308-0198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.


Alexander H. Spiegler
January 5, 2004


GARY BENZION, PH.D
SUPERVISORY PATENT EXAMINER
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